



Element Materials Technology - Fort Wayne  
328 Ley Rd.  
Fort Wayne, IN 46825  
TEL: (260) 424-1622 FAX: (260) 424-9124  
Website: [www.element.com](http://www.element.com)

July 17, 2021

Henry Padilla  
East Chicago Sanitary District  
5201 Indianapolis Blvd  
East Chicago, IN 46312  
TEL: 219 391 8466  
FAX: 219 391 8254

RE: Categorical 901

Order No.: 21061359

Dear Henry Padilla:

Element Materials Technology - Fort Wayne received 2 sample(s) on 6/11/2021 for the analyses presented in the following report.

In accordance with your instructions, a laboratory of Element Materials Technology Fort Wayne LLC either conducted or subcontracted these analyses. Subcontracted analyses will be identified in an accompanying case narrative and any associated report(s) will be attached in full. Unless otherwise noted in the case narrative, all analyses were conducted using approved methodologies. Reported results relate only to the items tested.

Estimated uncertainty is available upon request. This report shall not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions regarding these test results, please feel free to call.  
Sincerely,

A handwritten signature in black ink that reads 'Don Ellis II'.

Don Ellis II  
Project Manager  
328 Ley Rd.  
Fort Wayne, IN 46825



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## Case Narrative

WO#: 21061359

Date: 7/17/2021

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**CLIENT:** East Chicago Sanitary District

**Project:** Categorical 901

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The Available Cyanide testing was subcontracted to Eurofins Pittsburgh PA. Their report is attached in its entirety.

The surrogate recovery was outside of acceptance limits for the EPA 625 analysis on sample 21061359-001C due to suspected matrix interference. This data is reported based upon the acceptable recoveries in additional associated QC.

The report was revised to correct an error in the phenol calibration calculation. The changes have been reviewed by our Quality Manager to ensure validity.



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## Analytical Report

(wastewater)

WO#: 21061359

Date Reported 7/17/2021

**CLIENT:** East Chicago Sanitary District  
**Project:** Categorical 901  
**Lab ID:** 21061359-001  
**Client Sample ID** #901  
**Sample Location:**

**Collection Date:** 6/10/2021 10:43:00 AM  
**Matrix:** WASTEWATER

Analyses	Result	RL	Qual	Units	DF	PL	Date Analyzed
<b>OIL AND GREASE, TOTAL</b>					<b>E1664</b>		Analyst: <b>SME</b>
Oil & Grease, Total	57.2	5.0	*	mg/L	1	50.0	6/14/2021 9:52:17 PM
<b>OIL AND GREASE, PETROLEUM HYDROCARBONS</b>					<b>E1664</b>		Analyst: <b>SME</b>
Oil & Grease, Petroleum	44.4	5.0		mg/L	1	100	6/18/2021 2:28:28 PM
<b>SV COMPOUNDS FOR CATEGORICAL RQTS</b>					<b>E625</b>		Analyst: <b>SDF</b>
Bis(2-ethylhexyl)phthalate	< 100	100		µg/L	10	160	6/18/2021 3:26:00 PM
Carbazole	< 100	100		µg/L	10		6/18/2021 3:26:00 PM
Fluoranthene	< 100	100		µg/L	10	54	6/18/2021 3:26:00 PM
n-Decane	< 100	100		µg/L	10		6/18/2021 3:26:00 PM
n-Octadecane	120	100		µg/L	10		6/18/2021 3:26:00 PM
<b>SEMI-VOLATILES IN WW</b>					<b>E625</b>		Analyst: <b>SDF</b>
Phenanthrene	< 100	100		µg/L	10		6/18/2021 3:26:00 PM

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area response
	ND	Not Detected at the Reporting Limit	PL	Permit Limit
	PQL	Practical Quantitation Limit	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		



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## Analytical Report

(wastewater)

WO#: 21061359

Date Reported 7/17/2021

**CLIENT:** East Chicago Sanitary District **Collection Date:** 6/10/2021 10:43:00 AM  
**Project:** Categorical 901  
**Lab ID:** 21061359-002 **Matrix:** WASTEWATER  
**Client Sample ID** #901  
**Sample Location:**

Analyses	Result	RL	Qual	Units	DF	PL	Date Analyzed
<b>FLUORIDE</b>					<b>E300.0</b>		Analyst: <b>HNN</b>
Fluoride	4.4	1.0	*	mg/L	10	2.9	6/11/2021 9:32:23 PM
<b>CHEMICAL OXYGEN DEMAND</b>					<b>M5220 D</b>		Analyst: <b>NME</b>
Chemical Oxygen Demand	1,530	50.0		mg/L	5		6/18/2021 8:45:00 AM
<b>AMMONIA AS N</b>					<b>E350.1</b>		Analyst: <b>AJC</b>
Nitrogen, Ammonia (As N)	78.5	1.00	*	mg/L	10	77.0	6/15/2021 1:00:00 PM
<b>PHENOLICS IN WASTEWATER</b>					<b>E420.1</b>		Analyst: <b>ANS</b>
Phenolics, Total Recoverable	8.37	0.250	*	mg/L	10	0.700	6/15/2021 4:17:00 PM
<b>TOTAL PHOSPHORUS</b>					<b>M4500-P F</b>		Analyst: <b>CDS</b>
Total Phosphorus	0.416	0.050		mg/L	1	5.50	6/15/2021 3:44:27 PM
<b>TOTAL SUSPENDED SOLIDS</b>					<b>M2540 D</b>		Analyst: <b>NME</b>
Suspended Solids (Residue, Non-Filterable)	225	36		mg/L	1		6/17/2021 10:59:00 AM
<b>MERCURY</b>					<b>E245.1</b>		Analyst: <b>FJR</b>
Mercury	0.00020	0.00010		mg/L	1		6/16/2021 7:57:18 AM
<b>METALS IN WATER BY ICP-MS, TOTAL</b>					<b>E200.8</b>		Analyst: <b>FJR</b>
Arsenic	0.00903	0.00020		mg/L	1	0.500	6/15/2021
Chromium	0.0107	0.00040		mg/L	1	0.282	6/15/2021
Cobalt	0.00368	0.00020		mg/L	1		6/15/2021
Copper	0.0142	0.00020		mg/L	1	0.301	6/15/2021

**Qualifiers:**  
\* Value exceeds Maximum Contaminant Level  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitation Limit  
S Spike Recovery outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
M Manual Integration used to determine area response  
PL Permit Limit  
RL Reporting Detection Limit



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## Analytical Report

(wastewater)

WO#: 21061359

Date Reported 7/17/2021

**CLIENT:** East Chicago Sanitary District **Collection Date:** 6/10/2021 10:43:00 AM  
**Project:** Categorical 901  
**Lab ID:** 21061359-002 **Matrix:** WASTEWATER  
**Client Sample ID** #901  
**Sample Location:**

Analyses	Result	RL	Qual	Units	DF	PL	Date Analyzed
METALS IN WATER BY ICP-MS, TOTAL				E200.8	Analyst: FJR		
Lead	0.00266	0.00020		mg/L	1	0.224	6/15/2021
Molybdenum	0.00868	0.00020		mg/L	1	0.200	6/15/2021
Nickel	0.0361	0.00100		mg/L	1	0.390	6/15/2021
Tin	< 0.00500	0.00500		mg/L	1		6/15/2021
Zinc	0.533	0.00400		mg/L	10	1.48	6/18/2021


<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area response
	ND	Not Detected at the Reporting Limit	PL	Permit Limit
	PQL	Practical Quantitation Limit	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		



w197 015 M40

## Chain of Custody

Laboratory Number: 21061359

Company Name: Contact Name: Address: City, State Zip: Phone Number: Fax Number: E-mail Address:	Client Information:		Billing Information:		PO Number:	Project Name/Number: <b>Categ 8-901</b>	Page 1 of 1 <b>Matrix Code</b> DW = Drinking Water WW = Waste Water GW = Ground Water AQ = Aqueous OT = Other SL = Sludge    SOL = Solid O = Oil        SO = Soil F = Food       SW = Swab NG = Natural Gas NGL = Natural Gas Liquid PW = Produced Water CF = Completion Fluid
	East Chicago Sanitary District		Same		Quote Number:		
	Henry Padilla				Required QC Level	Sampler's Signature 	
	5201 Indianapolis Blvd						
	East Chicago IN 46312						
	219-391-8466      Ext. 240		Ext:		Bill Monthly	Shipping Method: UPS / FedEx Element / Hand / Mail	
					<input type="checkbox"/> Yes <input type="checkbox"/> No		
hpadilla@eastchicago.com							

Which Regulations Apply:		Turn Time 5 TAT	(Rush turn times will incur a surcharge and must be pre- approved by lab.)	Container		Pres.	Requested Tests								Comments		
<input type="checkbox"/> RCRA <input type="checkbox"/> POTW <input type="checkbox"/> NPDES <input type="checkbox"/> USDA/FDA <input type="checkbox"/> RECAP/RISC	<input type="checkbox"/> Drinking Water <input type="checkbox"/> Distribution <input type="checkbox"/> Special <input type="checkbox"/> State <input type="checkbox"/> Other			Quantity	Type P=Plastic, G=Glass, V=Vial	HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	CYANIDE 1677	Oil & Grease T&SI	**SVOC list	*Metals	NH <sub>3</sub> , T.PHOS, COD	PHENOL	300: Fluoride	TSS	Yes	No	
Sample ID/Description		Collection Information			Matrix											*As, Cr, Cu, Pb, Mo, Ni, Zn, & Hg, Extra: Co, Sn  **Carbazole, n- Decane, Fluoranthene, n-Octadecane, Phenanthrene, Bis(2EH) Phthalate	
		Date	Time	Grab / Composite													
\$-901 Grab <i>Categorical</i>		6-10-21	10:43	Grab	WW	1	P	NAOH	x								
\$-901 Grab				Grab	WW	1	G	H2SO4		x							
\$-901 Grab				Grab	WW	1	G	NONE			x						
\$-901 Composite				Comp	WW	1	P	HNO3				x					
\$-901 Composite				Comp	WW	1	P	H2SO4					x				
\$-901 Composite				Comp	WW	1	G	H2SO4						x			
\$-901 Composite				Comp	WW	2	P	NONE							x	x	

	Relinquished by	Date/Time	Received by	Date/Time	Composite Sampler: Start Date/Time End Date/Time
1	M. Luba	6-11-21 / 1020	Steve D. Best	6-11-21 / 1025	6-10-21 10:47 6-11-21 8:21
2	Steve D. Best	6-11-21 / 1600	Rebekah Chervin	6-11-21 / 1600	Received at lab on ice?
3					<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: 4°

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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